

CLAIMS

1. A method of manufacturing a micromachined component comprising:
using a first liquid to etch a first layer located underneath a second layer;
exposing the second layer to a second liquid after using the first liquid, the
second liquid being inorganic and miscible in carbon dioxide; and
5 supercritical drying the micromachined component with carbon dioxide
after exposing the second layer to the second liquid.
2. The method of claim 1 further comprising:
forming the first layer comprised of silicon dioxide, and
providing the first liquid comprised of hydrofluoric acid.
- 10 3. The method of claim 1 further comprising:
forming the first layer comprised of germanium, and
providing the first liquid comprised of hydrogen peroxide.
4. The method of claim 1 further comprising:
forming the first layer comprised of a polymer, and
15 providing the first liquid comprised of an organic solvent.

providing the second liquid comprised of carboxylic acid.

providing the second liquid comprised of acetic acid.

providing the second liquid consisting of glacial acetic acid.

exposing the second layer to a third liquid after using the first liquid and before exposing the second layer to the second liquid.

providing the first liquid miscible in the third liquid.

exposing the second layer to a fourth liquid after exposing the second layer to the third liquid and before exposing the second layer to the second liquid.

11. The method of claim 10 further comprising:

providing the first liquid miscible in the third liquid; and

providing the third liquid miscible in the fourth liquid.

12. The method of claim 10 further comprising:

5 exposing the second layer to a fifth liquid after exposing the second layer to the fourth liquid and before exposing the second layer to the second liquid.

13. The method of claim 12 further comprising:

providing the first liquid miscible in the third liquid;

providing the third liquid miscible in the fourth liquid;

10 providing the fourth liquid miscible in the fifth liquid; and

providing the fifth liquid miscible in the second liquid.

14. The method of claim 12 further comprising:

providing a single liquid for the third and fifth liquids.

15. A micromachined component manufactured by the method of claim 1.

15 17. The method of claim 16 further comprising:
providing the first liquid comprised of hydrofluoric acid;
providing the second liquid comprised of deionized water; and
providing the third liquid comprised of carboxylic acid.

20 displacing the second liquid with a fourth liquid.

providing the second liquid miscible in the fourth liquid.

displacing the fourth liquid with a fifth liquid,

wherein:

exposing the second structural layer to the third liquid further comprises:

displacing the fifth liquid with the third liquid.

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providing the second liquid miscible in the fourth liquid;
providing the fourth liquid miscible in the fifth liquid; and
providing the fifth liquid miscible in the third liquid.

providing a single liquid for the second and fifth liquids.

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providing the fourth liquid comprised of hydrogen peroxide;

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providing the fifth liquid comprised of deionized water; and

providing the third liquid comprised of acetic acid.

wherein:

displacing the second liquid with the third liquid.

25. A micromachined component manufactured by the method of claim 16.

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